

ABSTRACT OF THE DISCLOSURE

A system operates to adaptively control the stability of an on-frequency repeater. A unique signature is imposed on RF signals transmitted by the repeater, and RF signals received by the repeater analyzed to detect signal components corresponding to the signature. The signature and the detected signal components are correlated by a micro-controller, which operates in accordance with an Adaptive Control Algorithm to adjust the ERP of RF signals transmitted by the repeater to limit signal leakage and thereby control the stability of the repeater.

12
13
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34